## PHYS 2071 Introduction to Physics Laboratory (0-2-1).

**Course Maximum Enrollment: 25** 

Special Facility or Equipment Needs/Safety Rules and Issues: A properly equipped physical lab

Lab Fee: None

**Course Description:** Selected laboratory experiments designed to supplement the material in Physics 2070.

**Pre- and Co-requisites:** A grade of "C" or better in MATH 1100

**Texts and Readings:** Custom

(*Physics* by James S. Walker, Pearson Prentice Hall, 3<sup>rd</sup> edition or latest edition)

**Course Goal:** Is to acquaint students with college level, algebraic physics as it applies to fundamental applications of motion, work, energy, momentum and angular momentum, forces, vibrations and waves, and heat within a laboratory setting.

**Course Objectives:** After completing the course the student will have a better understanding of:

- Motion
- Newton's Laws of Mechanics
- Energy and its Conservation
- Dynamics
- Gravitation
- Waves (sound)
- Temperature
- 1<sup>st</sup> Law of Thermodynamics
- Theory of Gases

## **Course Content:**

Measurements
Vectors
Motion
Newton's Law of Mechanics
Energy, Work and the conservation of Energy
Collision Dynamics
Rotational Kinematics
Simple Harmonic Motion
Gravitation
Wave Motion-Sound
Temperature-Heat
1 <sup>st</sup> Law of Thermodynamics
Kinetic Theory of Gases
2 <sup>nd</sup> Law of Thermodynamics

**Assessment:** Grades will be assessed based on student performance on exams, quizzes and other assignments as deemed appropriate by the instructor

**Reading and Writing Across the Curriculum:** The reading and writing components of these aforementioned assessments satisfies the Reading and Writing Across the Curriculum requirement as stipulated in SLCC's academic policy.

**Grading and Absence Policy:** Grading Scale: 100-90 = A; 89-80 = B; 79-70 = C; 69-60 = D; 59-0 = F. Students who miss 10% of class meetings will be advised to see a counselor. Students who merely stop attending and chose not to withdraw will earn an "F" for the course.

**Students with Disabilities:** Students with a disability requiring assistance or accommodation, such as for testing, note takers, readers, etc., should contact the instructor as soon as possible. Students may also contact the dean of Students with questions about such services.

**Emergency Evacuation Procedure:** A map of this floor is posted in the front of this building. The map marks the evacuation route and the Designated Rescue Area. This area is where emergency service personnel will go first to look for individuals who need assistance in exiting the building. Students who may need assistance should identify themselves to the teaching faculty.